(19) World Intellectual Property Organization

International Bureau





(43) International Publication Date 24 February 2005 (24.02.2005)

PCT

(10) International Publication Number WO 2005/016361 A1

(51) International Patent Classification⁷: C01B 21/26, 31/02, 9/08

A61K 35/78,

(21) International Application Number:

PCT/IB2003/003678

(22) International Filing Date: 15 August 2003 (15.08.2003)

(25) Filing Language:

English

(26) Publication Language:

English

(71) Applicant (for all designated States except US):
AVESTHA GENGRAINE TECHNOLOGIES PVT.
LTD. [IN/IN]; "Discoverer", 9th Floor, Unit 3, International Tech Park, Whitefield Road, Bangalore 560 066, Karnataka (IN).

(72) Inventors; and

(75) Inventors/Applicants (for US only): PATELL, Villoo, Morawala [IN/IN]; Avestha Gengraine Technologies Pvt. Ltd., "Discoverer", 9th Floor, Unit 3, International Tech Park, Whitefield Road, Bangalore 560 066, Karnataka (IN). VYAS, Dhruvdev [IN/IN]; Avestha Gengraine Technologies Pvt. Ltd., "Discoverer", 9th Floor, Unit 3, International Tech Park, Whitefield Road, Bangalore 560 066, Karnataka (IN).

(81) Designated State (national): US.

(84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv)) for US only

Published:

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: BIOTHERAPEUTICS FOR MITIGATION OF HEALTH DISORDERS FROM TERMINALIA ARJUNA

(57) Abstract: The present invention relates to a series of metabolites, which were isolated from *Terminalia arjuna* and characterized for therapeutically relevant molecules to be used in treatment of various health related disorders like cardiovascular disorders and as antibacterial agents. The extracts from the plants were subjected to both, targeted and non-targeted screening procedures. The present invention also relates to a series of extracts exhibiting significant antioxidant potential, as indicated by the DPPH free radical scavenging and reducing potential, thereby extrapolating to its card ioprotective function. The broad-spectrum activity of *Terminalia arjuna* extracts against the microorganisms tested potentates its application as an anti-microbial agent.